

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-6. (cancelled)

7. (currently amended) A method for allowing a client application to establish, in a client network, a first connection having a first security level[[,]] with a first port of a server application hosted in a server machine linked to a server network, in order to send messages addressed to the server machine, said messages passing from the client network to the server network through a network layer (CR) of a gateway machine, the method comprising:

creating a second port in the gateway machine;

rerouting to the second port of the gateway machine, by ordering the network layer (CR) of the gateway machine, to reroute to the second port of the gateway machine any message sent and addressed to the first port of the server application, addressed to the server machine;

receiving at the second port of the gateway machine a request addressed to the first port of the server application to establish said first connection with the first port of the server application;

listening to the second port of the gateway machine to detect the request addressed to the first port of the server application to establish said first connection with the first port of the server application; and

generating, in the gateway machine, a thread ~~for establishing~~ which establishes said first connection; ~~when the request to establish said first connection is detected in the second port of the gateway machine~~

wherein said generating is performed in response to the detection of the request addressed to the first port of the server application to establish said first connection.

8. (currently amended) A method according to claim 7, further comprising:

defining a third port of the server application for receiving at least one of the messages with a second security level; ~~and whereas~~

wherein said thread; comprises;

~~establishing~~ establishes said first connection in a first phase with ~~[[a]]~~ the first security level in a first interface associated with the second port and with said request;

~~establishing~~ establishes in a second phase, a second connection with ~~[[a]]~~ the second level of security in a second interface to the third port in the server machine;

~~writing~~ writes with the second security level in the second interface, any message read in the first interface with the first security level in a third phase, and ~~[[;]]~~

~~writing~~ writes with the first security level in the first interface, any message read in the second interface with the second security level in a fourth phase.

9. (currently amended) A method according to claim 8, further comprising:

deleting, by ordering the network layer (CR) of the gateway machine, ~~to~~ delete any message sent to the third port.

10. (currently amended) A method according to claim 7, wherein ~~the steps of~~ said creating and ordering rerouting are executed automatically by a first process of the gateway machine, and ~~in that~~ said first process generates a second process that executes ~~the third and the fourth step~~ said listening and generating.

11. (currently amended) A method according to claim 8, wherein ~~the steps of~~ said creating and ordering rerouting are executed automatically by a first process of the gateway machine, and ~~in that~~

said first process generates a second process that executes ~~the third and the fourth step~~ said listening and generating.

12. (currently amended) A method according to claim 9 [[10]], further comprising:

automatically executing ~~the steps of~~ said creating, rerouting, and deleting, by a first process of the gateway machine; and

generating, by said first process, a second process that executes ~~the steps of~~ said listening and said generating a thread.

13. (cancelled)

14. (currently amended) A method for allowing a client application to establish, in a client network, a first connection having a first security level[[.]] with a first port of a server application hosted in a server machine linked to a server network, in order to send messages addressed to the server machine, said messages passing from the client network to the server network through a network layer (CR) of a gateway machine, ~~characterized in that it consists of~~ the method comprising:

generating, in the gateway machine, a thread which establishes said first connection; and

activating, in the gateway machine, a secure application proxy that reroutes the messages addressed to the first port of the server application away from the first connection, in a way that is transparent ~~for~~ to the client application, ~~in order~~ so as to establish a second connection having a second security level with the server application,

wherein said generating is performed in response to the detection of the request addressed to the first port of the server application to establish said first connection, and

said second connection ~~being~~ is unknown to said client application.

15. (new) A method according to claim 10, further comprising:

defining a third port of the server application for receiving at least one of the messages with a second security level; and

deleting, by ordering the network layer (CR) of the gateway machine, any message sent to the third port.

16. (new) A method according to claim 15, further comprising:

automatically executing said creating, rerouting, and deleting, by a first process of the gateway machine; and

generating, by said first process, a second process that executes said listening and generating.